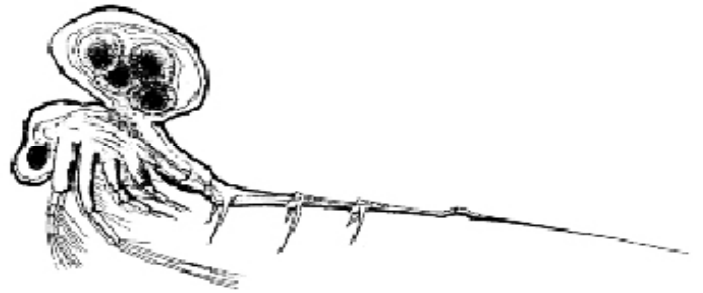




Anglers and resource managers across the U.S. are concerned about exotic species that threaten aquatic systems. Several occur here at Pictured Rocks National Lakeshore and in nearby waters. With your help, the impact of these invaders on our lakes and rivers can be minimized.

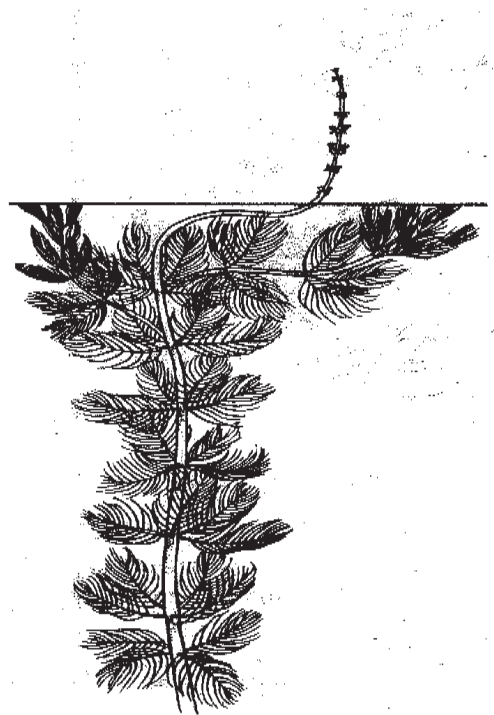
Spiny Water Flea

This small animal (*Bythotrephes* sp.) is a harmful exotic species, and has been found in Lake Superior and Big Beaver Lake. It is not an insect, but a tiny crustacean (less than 1/2" long) with a long, sharp, barbed tail spine. While the effects of its presence are not completely known, it competes with young perch and other small fish for food such as *Daphnia* zooplankton. Populations have exploded and the animal can now be found throughout the Great Lakes and in some inland lakes, including at least five lakes across the Upper Peninsula. The barbs on their tails can catch on fishing and anchor line.



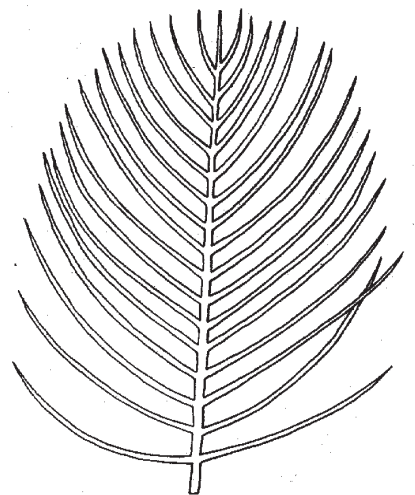
Eurasian Water Milfoil

This is an exotic plant, introduced to the U.S. by the aquarium industry. It is rapidly becoming a major nuisance throughout North America. It is capable of rapid spreading, mainly by fragmentation of plant parts. Each fragment is capable of growing roots and eventually developing into a new plant. Removal of fragments from boat trailers and along shorelines will help prevent its spread into new areas. Eurasian Milfoil is quite competitive with native species and may completely dominate a pond or lake within a few years after introduction. Due to the plant's ability to form dense growths, water use activities may become severely impaired. These plants have little use as food for wildlife or as cover for fish. Plant fragments can be carried from one lake to another on propellers and boat trailers.



Zebra Mussels

Zebra mussels are small, fingernail-sized mussels native to the Caspian Sea of Asia. Tolerant of a wide range of conditions, they have now spread to all of the Great Lakes and Mississippi River and are being found in inland lakes. Zebra mussels clog water systems of power plants and water treatment facilities as well as irrigation systems. They have severely reduced and eliminated native mussel species in some inland lakes. Microscopic larvae may be carried in livewells or bilge water. Adults can attach to boats or boating equipment that sit in the water.



What Can I Do?

- * Inspect your boat, trailer, and boating equipment (anchors, centerboards, rollers, axles) and remove any plants and animals that are visible before leaving any water body.
- * Drain water from the motor, live well, bilge, and transom wells while on land before leaving the lake area.
- * Empty your bait bucket on land before leaving the water body. Never release live bait into a water body, or release aquatic animals from one water body into another.
- * Learn what these organisms look like (at least those you can see). If you suspect a new infestation of an exotic plant or animal report it to the Lakeshore staff.

For more information on exotic species, see:
www.nature.nps.gov/biology/invasivespecies/index.htm
www.nps.gov/piro/naturescience/nonnativespecies.htm

